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REMARKS/DISCUSSION OF ISSUES

Specification. In the Non-Final Office Action, Examiner Abel-Jalil objected to the abstract for containing more than 150 words. The Applicant has amended the specification herein to obviate this objection to the abstract as well as to correct a typographical error. No new matter was introduced by the amendments of the specification herein.

Drawings. The attached replacement drawing sheet 1/5 includes a correction of a mislabeling of "FIG. 1" to "FIG. 1A". Examiner Abel-Jalil is therefore respectfully requested to approve the proposed replacement drawing sheet 1/5.

Claims 1-6, 11-13, 16, 19 and 20. In the Non-Final Office Action, Examiner Abel-Jalil rejected pending claims 1-6, 11-13, 16, 19, and 20 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,249,883 B1 to *Cassidy* et al. The Applicant responds to this rejection as subsequently recited herein, and respectfully requests reconsideration and further examination of claims 1-6, 11, 13, 16, 19, and 20 under 37 CFR § 1.112.

As to the §102(e) rejection of claims 1-6, 11-13, 16, 19, and 20, the Applicant has thoroughly considered Examiner Abel-Jalil's remarks concerning the patentability of claims 1-6, 11-13, 16, 19, and 20 over *Cassidy*. The Applicant has also thoroughly read *Cassidy*. To warrant this §102(e) rejection of claims 1-6, 11-13, 16, 19, and 20, *Cassidy* must show each and every limitation of claims 1-6, 11-13, 16, 19, and 20 in as complete detail as in contained in claims 1-6, 11-13, 16, 19, and 20. See, MPEP §2131. The Applicant respectfully traverses this §102(e) rejection of claims 1-6, 11, 13, 16, 19, and 20, because *Cassidy* teaches away from the following limitations of claims 1-6, 11, 13, 16, 19, and 20:

1. "operating said event master server to store said sequence number within said master directory database" as recited in independent claim 1;

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2. "operating a master database to replicate a data manipulation and a sequence number to a replicate directory database, said sequence number corresponding to an event notification" and "operating an event service server to provide said event notification to an event client server in response to said replication of said sequence number to said replicate directory database" as recited in independent claim 4;
3. "assigning a first sequence number to said modified message when said modified message is within said first queue" and "storing said first sequence number within said master directory database" as recited in independent claim 6;
4. "said event master server is further operable to store said sequence number within said master directory database" as recited in amended independent claim 11;
5. "a means for storing said first sequence number within a master directory database" as recited in independent claim 16;
6. "an event service server operable to determine said sequence number being stored within a replicate directory database" and "an event client server operable to provide an event notification to at least one directory client when said sequence number is being stored within said replicated directory database, said event notification corresponding to said manipulation of said data" as recited in independent claim 19; and

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7. "a directory event subsystem operable to notify said directory client of any manipulation of said master directory database by said directory service provider server" as recited in independent claim 20.

As to the traversal, the scopes of independent claims 1, 4, 6, 16, 19 and 20 are directed to timely notifications to directory clients of data replications within databases whereby there is no need to predict system and network failures due to unknown timing of data replications within databases. By comparison, the teachings of *Cassidy* are directed to predicting system and network failures stemming from data replications within databases due to an omission of timely notifications to directory clients of data replications within databases. This distinction between the present invention and *Cassidy* is unequivocal in view of a proper operational understanding of the present application and *Cassidy*.

Specifically, *Cassidy* teaches a method of predicting system and network failures stemming from data replications within databases that is not based on timely notifications of data replications within databases to directory clients, but based on a storage of sequence numbers within a net model and domain models (e.g., models 416, 436 and 446 as illustrated in FIG. 4) where the sequence numbers are related to data replications within databases (e.g., databases 114, 128 and 144 as illustrated in FIG. 4) and a comparison of the sequence numbers stored within a net model versus the sequence numbers stored within the domain models provides a prediction of system and network failures stemming from data replications within databases.

As illustrated in FIGS. 4 and 7, the network failure prediction as taught by *Cassidy* implements three decision blocks.

The first decision block 812 involves a determination by a net administrator 418 as to whether all data replication within databases 114, 128 and 144 should be complete as of the periodic review or whether any data replication within one or more database 114, 128 and 144 is probably ongoing as of the periodic review by testing the time limit of each sequence number stored within a net model 416.

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If net administrator 418 determines all data replication within databases 114, 128 and 144 should be complete as of the periodic review, then the second decision block 816 involves a determination by net administrator 418 as to whether at least one of a domain controller 406 and a domain controller 408 is reporting a sequence number that indicates a particular data replication within an associated database has not commenced as of the periodic review by testing whether one or more of the sequence numbers reported by controllers 406 and 408 does not match any sequence number for that particular data replication. An alert condition exists if domain controller 406 and/or domain controller 408 are reporting a sequence number that does not match any sequence number for that particular data replication.

Otherwise, if both domain controllers 406 and 408 are reporting a sequence number that does match any sequence number for that particular data replication, then the third decision block 822 involves a determination by net administrator 418 as to whether a time differential between a first sequent number associated with the particular data replication and a last sequence number associated with the particular data replication warrants an alert condition.

Clearly, these elaborate prediction steps as taught by *Cassidy* are needed because *Cassidy* teaches away from a timely notification to directory client 108, 110, 124, and 140 as illustrated in FIG. 1 of data replication with databases 114, 128, and 144. By teaching away from an event notification method that involves a storage of sequence numbers in databases and a notification of such storage of sequence numbers as taught by the present application, *Cassidy* unequivocally teaches away the aforementioned limitations of independent claims 1, 4, 6, 16, 19 and 20. Withdrawal of the rejection of independent claims 1, 4, 6, 16, 19 and 20 under U.S.C. §102(e) as being anticipated by *Cassidy* is therefore respectfully requested.

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Claims 2 and 3 depend from independent claim 1. Therefore, dependent claims 2 and 3 include all of the elements and limitations of independent claim 1. It is therefore respectfully submitted by the Applicant that dependent claims 2 and 3 are allowable over *Cassidy* for at least the same reason as set forth herein with respect to independent claim 1 being allowable over *Cassidy*. Furthermore, the Applicant respectfully asserts that *Cassidy* teaches away from the following limitations of dependent claims 2-3 for the same reason as set forth herein with respect to independent claim 1:

1. "operating said master database to replicate said sequence number to a replicate directory database", and "operating said event service server to provide said event notification to an event client server in response to said replication of said sequence number to said replicate directory database" as recited in dependent claim 2; and
2. "operating said event client server to provide said event notification to at least one directory client registered to receive said event notification" as recited in dependent claim 3;

Withdrawal of the rejection of dependent claims 2 and 3 under U.S.C. §102(e) as being anticipated by *Cassidy* is therefore respectfully requested.

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Claim 5 depends from independent claim 4. Therefore, dependent claim 5 includes all of the elements and limitations of independent claim 4. It is therefore respectfully submitted by the Applicant that dependent claims 5 is allowable over *Cassidy* for at least the same reason as set forth herein with respect to independent claim 4 being allowable over *Cassidy*. Furthermore, the Applicant respectfully asserts that *Cassidy* teaches away from "operating said event client server to provide said event notification to at least one directory client registered to receive said event notification" as recited in dependent claim 5 for the same reason as set forth herein with respect to independent claim 4.

Withdrawal of the rejection of dependent claim 5 under U.S.C. §102(e) as being anticipated by *Cassidy* is therefore respectfully requested.

Claim 13 depends from independent claim 11. Therefore, dependent claim 13 includes all of the elements and limitations of independent claim 11. It is therefore respectfully submitted by the Applicant that dependent claims 13 is allowable over *Cassidy* for at least the same reason as set forth herein with respect to independent claim 11 being allowable over *Cassidy*. Furthermore, the Applicant respectfully asserts that *Cassidy* teaches away from "a replicate directory database operable to store said data, wherein said master directory database is further operable to replicate said data and a second sequence number to said replicate directory database" as recited in dependent claim 13 for the same reason as set forth herein with respect to independent claim 11.

Withdrawal of the rejection of dependent claim 13 under U.S.C. §102(e) as being anticipated by *Cassidy* is therefore respectfully requested.

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Claims 7-10, 14, 15, 17, and 18. In the Non-Final Office Action, Examiner Abel-Jalil rejected pending claims 7-10, 14, 15, 17 and 18 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,249,883 B1 to *Cassidy* et al. in view of U.S. Patent No. 6,192,408 B1 to *Vahalia* et al. The Applicant responds to this rejection as subsequently recited herein, and respectfully requests reconsideration and further examination of claims 7-10, 14, 15, 17 and 18 under 37 CFR § 1.112.

As to the §103(a) rejection of claims 7-10, 14, 15, 17 and 18, the Applicant has thoroughly considered Examiner Abel-Jalil's remarks concerning the patentability of claims 7-10, 14, 15, 17 and 18 over *Cassidy* in view of *Vahalia*. The Applicant has also thoroughly read *Cassidy* and *Vahalia*. To establish a *prima facie* case of obviousness, there must be some suggestion or motivation in *Cassidy* and *Vahalia* to modify *Cassidy* in view of *Vahalia* as proposed by Examiner Abel-Jalil. See, MPEP §2143. The Applicant respectfully traverses this §103(a) rejection of claims 7-10, 14, 15, 17 and 18, because *Cassidy* teaches away from the modification of *Cassidy* in view of *Vahalia* as proposed by Examiner Abel-Jalil by teaching away from the following limitations of claims 7-10, 14, 15, 17 and 18:

1. "polling a replicate directory database for a second sequence number in response to said first sequence number being within said second queue" as recited in dependent claim 7;
2. "providing an event notification to at least one directory client when said first sequence number is less than or equal to said second sequence number" as recited in dependent claim 8;

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3. "polling a replicate directory database for a second sequence number in response to said first sequence number being within said second queue" as recited in independent claim 9;
4. "providing an event notification to at least one directory client when said first sequence number is less than or equal to said second sequence number" as recited in dependent claim 10;
5. "an event service server operable to poll said replicate directory database for said second sequence number in response to said first sequence number from said event master server" as recited in dependent claim 14;
6. "an event client server operable to provide an event notification to said directory client, wherein said event service server is further operable to provide said event notification to said event client server when said first sequence number is less than or equal to said second sequence number" as recited in dependent claim 15;
7. "a means for polling a replicate database for a second sequence number in response to said second sequence number being within said second queue" and "a means for providing said event notification when said first sequence number is less than or equal to said second sequence number" as recited in dependent claim 17; and

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8. "a means for polling a replicate database for a second sequence number in response to said second sequence number being within said queue" and "a means for providing said event notification when said first sequence number is less than or equal to said second sequence number" as recited in independent claim 19.

As to the traversal, the scopes of independent claims 7-10, 14, 15, 17 and 18 are directed to timely notifications to directory clients of data replications within databases whereby there is no need to predict system and network failures due to unknown timing of data replications within databases. By comparison, the teachings of *Cassidy* are directed to predicting system and network failures stemming from data replications within databases due to an omission of timely notifications to directory clients of data replications within databases. Again, this distinction between the present invention and *Cassidy* is unequivocal in view of a proper operational understanding of the present application and *Cassidy*.

As previously stated herein, the elaborate prediction steps as taught by *Cassidy* are needed because *Cassidy* teaches away from a timely notification to directory client 108, 110, 124, and 140 as illustrated in FIG. 1 of data replication with databases 114, 128, and 144. By teaching away from an event notification method that involves a polling of replicate databases for sequences numbers and a notification to directory clients based on the polling as taught by the present application, *Cassidy* unequivocally teaches away from the aforementioned limitations of claims 7-10, 14, 15, 17 and 18. Withdrawal of the rejection of independent claims 7-10, 14, 15, 17 and 18 under U.S.C. §103(a) as being unpatentable over *Cassidy* in view of *Vahulia* is therefore respectfully requested.

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Furthermore, claims 7 and 8 depend from independent claim 6. Therefore, dependent claims 7 and 8 include all of the elements and limitations of independent claim 6. It is therefore respectfully submitted by the Applicant that dependent claims 7 and 8 are allowable over *Cassidy* in view of *Vahaila* for at least the same reason as set forth herein with respect to independent claim 6 being allowable over *Cassidy*. Withdrawal of the rejection of dependent claims 7 and 8 under U.S.C. §103(a) as being unpatentable over *Cassidy* in view of *Vahaila* is therefore respectfully requested.

Claims 14 and 15 depend from amended independent claim 11. Therefore, dependent claims 14 and 15 include all of the elements and limitations of amended independent claim 11. It is therefore respectfully submitted by the Applicant that dependent claims 14 and 15 are allowable over *Cassidy* in view of *Vahaila* for at least the same reason as set forth herein with respect to amended independent claim 11 being allowable over *Cassidy*. Withdrawal of the rejection of dependent claims 14 and 15 under U.S.C. §103(a) as being unpatentable over *Cassidy* in view of *Vahaila* is therefore respectfully requested.

Claim 17 depends from independent claim 16. Therefore, dependent claim 17 includes all of the elements and limitations of independent claim 16. It is therefore respectfully submitted by the Applicant that dependent claims 17 is allowable over *Cassidy* in view of *Vahaila* for at least the same reason as set forth herein with respect to independent claim 16 being allowable over *Cassidy*. Withdrawal of the rejection of dependent claim 17 under U.S.C. §103(a) as being unpatentable over *Cassidy* in view of *Vahaila* is therefore respectfully requested.

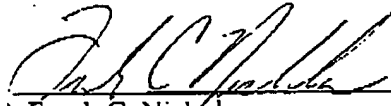
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CONCLUSION

The Applicants respectfully submit that claims 1-20 as listed herein fully satisfy the requirements of 35 U.S.C. §§102, 103 and 112. In view of the foregoing, favorable consideration and early passage to issue of the present application is respectfully requested.

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